



*With the author's
Compts.*

BOLOGNA :

The Part which it has played in the History of Anatomy :

ITS OCTO-CENTENARY CELEBRATION.

A Lecture delivered to the Anatomy Class of Trinity College on the
1st November, 1888.

BY

D. J. CUNNINGHAM, M.D. (DUBL. & EDINBURGH)

ONE OF THE DELEGATES FROM THE UNIVERSITY OF DUBLIN TO THE COMMEMORATION
CEREMONY AT BOLOGNA.

Reprinted from the Dublin Journal of Medical Science—December, 1888.

DUBLIN :

PRINTED FOR THE AUTHOR

BY JOHN FALCONER, 53 UPPER SACKVILLE-STREET

1888.

BOLOGNA :

The Part which it has played in the History of Anatomy :

ITS OCTO-CENTENARY CELEBRATION.

A Lecture delivered to the Anatomy Class of Trinity College on the
1st November, 1888.



BY

D. J. CUNNINGHAM, M.D. (DUBL. & EDIN.),

ONE OF THE DELEGATES FROM THE UNIVERSITY OF DUBLIN TO THE COMMEMORATION
CEREMONY AT BOLOGNA.

Reprinted from the Dublin Journal of Medical Science—December, 1888.

DUBLIN :

PRINTED FOR THE AUTHOR

BY JOHN FALCONER, 58 UPPER SACKVILLE-STREET

1888.

LECTURE.

ON the 12th of June, 1888, the University of Bologna celebrated its octo-centenary. The great antiquity of the famous Studium of Bologna renders this an event of interest to students of every class; but to us, who are students of anatomy, it is of especial interest, because it was in this ancient seat of learning that the science of anatomy was revived, after it had fallen into utter neglect in Europe during the barbarous period which we term the Dark Ages.

It would be wrong to allow so important an event to pass without some special notice. I purpose, therefore, devoting my opening lecture this session to an account of the part which Bologna has played in the history of anatomy; and when I have accomplished this I shall give you a brief sketch of the ceremony which took place at the celebration festival.

The time will not be misspent, because nothing is more calculated to awaken our interest in a subject than a contemplation of the various phases through which it has passed—nothing tends more to stimulate the ardour of a student than the tale told of the struggles undergone and the distinctions won by the early pioneers of the science which he is called upon to study.

The beginnings of anatomy are buried in obscurity. It is said that its study was pursued before the time of Hippocrates, but of this we know nothing with certainty. Hippocrates, who lived about 400 years before the Christian era, undoubtedly possessed some knowledge of the bones. It is stated that he modelled the human skeleton in brass, and caused it to be suspended in the temple of the Delphian Apollo; but although he had some rude general notions of the soft parts, it is extremely doubtful if he ever dissected a human subject.

The same may be said for the great naturalist, Aristotle, the tutor of the Prince of Macedon, who lived about one hundred years later. He knew more anatomy than Hippocrates, but his knowledge was entirely derived from a study of the lower animals.

Were it not outside the scope of the present lecture, I should like to dwell for a little on the widely-famed school for Grecian education, which was founded in Alexandria (320 B.C.) by the illustrious Ptolemies. Here, under the enlightened encouragement of these distinguished rulers, learning of all kinds flourished, and the dissection of the human body was for the first time distinctly authorised, and, in all probability, for the first time practised. Herophilus and Erisistratus were the two anatomists engaged in the work. By the orders of Ptolemy Soter subjects were supplied for dissection, and it is reported that he himself took part in the pursuit in order that the blind superstition and ignorant objections of the people might be subdued. The writings of both Herophilus and Erisistratus are completely lost, but their discoveries live in the pages of Galen and Caelius Aurelianus.

We shall now pass over a period of about 330 years. This brings us to Claudius Galenus, the physician of Pergamus, a great outstanding figure in the history of anatomy. Born in the 131st year of the Christian era, he devoted eleven years to the study of anatomy and medicine, and then returned to his native town at the age of 29. Here he inspired such confidence that the wounded gladiators were confided to his care, and he acquired the greatest distinction by the successful treatment of wounds which had hitherto baffled all the skill of the surgeons.

But it is as an anatomist that we have at present to regard him, and as such he stands unrivalled by all who had gone before him. A true observer, he draws his facts directly from nature, and so great were the awe and veneration in which he was held by succeeding generations of anatomists, that for many centuries to call in question the accuracy of the most trivial statement made by Galen was equivalent to rank heresy.

Galen possessed an extensive and accurate knowledge of the bones. He refers to his good fortune in having been able to study two human skeletons in Alexandria, and his osteological facts are for the most part directly drawn from man. It is very evident, however, that in some cases his descriptions were taken from the skeletons of monkeys.^a He was profoundly impressed with the importance of anatomy and physiology as branches of medical training, and he advocates the dissection of the human body. Notwithstanding this, it is extremely doubtful if he was ever able to do so

^a Thus he describes an intermaxillary bone; he is a little doubtful as to the number of the ribs; and he states that the sternum consists of seven pieces, &c., &c.

himself. The structure of the lower animals, and more especially of monkeys brought to him from Africa, he investigated most fully, and his descriptions of the soft parts have evidently been very largely prepared from these.^a

Such, then, was the condition of anatomy in the second century after the birth of Christ. The sum total of the knowledge which had been acquired may be estimated by the writings of Galen, and these are to be regarded, not only as the embodiment of his own researches, but also as containing the facts which had been ascertained by the anatomists who had lived before him.

Shortly after the death of Galen, which took place near the close of the second century, the light of anatomy became extinguished in Europe. Barbarous hordes began to press upon the Roman Empire, and ultimately, when its power was shattered, learning of all kinds decreased, and Europe sank into the utter darkness of ignorance and superstition.

There is some doubt as to the precise date at which the University of Bologna took origin. One writer considers that it is the lineal descendant of a learned institute, which existed when Bologna was an Etruscan City, called Felsina. With more modesty, but with little more truth, the foundation of the University is ascribed to Theodosius II., in the year 447.

The date which has been fixed by the University authorities themselves is 1088, but there is no documentary evidence to show that this is correct. All that is known is that somewhere about this time a private school of law sprang into existence. Pepo and Irnerius, the illustrious expounder of Roman Law, are the teachers whose names are especially associated with the origin of the Studium.^b

Soon the fame of this self-instituted school began to be noised abroad, and before long students thronged to it from every quarter of Europe. I do not exaggerate when I say that they came in

^a Still it is right to state: (1) that in his 13th Book, "On the use of Parts," he says—"I am determined to set forth the structure and composition of man alone." (2) In his 1st Book, "On Anatomical Manipulations," he remarks—"It is necessary to observe and look into every particle, especially in men." (3) In certain cases he draws a comparison between the structure of the ape and that of man, *e.g.*, in the tendons of the foot.

^b Among other ancient Universities may be mentioned Paris, founded in 1107; Modena in 1150; Oxford in 1200; Cambridge in 1250. Compared with these, Trinity College, Dublin, is comparatively speaking recent. It was founded in 1591, but it did not make a fair start until 1594. In six years, therefore, its ter-centenary will be reached.

thousands. In consideration of this, and of the fact that the common language employed in teaching and writing was Latin, well might Carducci, in his striking commemoration address, exclaim—“O Italy, beloved country! in the miseries of thy bondage thou didst delight in imagining the eagles of victory again flying forth from the Seven Hills over all nations; but, perchance, thy true glory, thy noblest revenge, were to be sought for at Bologna, where, with the tongue of the ancient empire, thou didst proclaim to the very nations who had oppressed thee the new gospel of civilisation, and didst teach them to throw off the yoke of barbarism and again become Roman!”^a

Gradually other branches of learning were added to law, and the Bolognese University gained new celebrity as a centre of philosophy and letters. And finally came medicine, but not until the thirteenth century. Thus Tiraboschi, in his *History of Italian Literature*, tells us that in 1250 the degrees of master and doctor, which had previously been given only to jurists and canonists, were conferred upon medical men. Further, to avoid confusion, the various professors had special subjects allocated to them, and a distinction was drawn between physicians and surgeons. Is it not significant of the efficiency of the school that anatomy, chemistry, and botany formed a part of the curriculum?

We are now approaching the time when the revival of anatomy in Europe took place, and from what I have told you of the activity of the early School of Medicine in Bologna, need you be surprised that it was here that it was quickened into life? Mondino de'Luzzi has the honour of having brought it about. Sir Wm. Turner styles him “this father of anatomy.”

Mondino, a Milanese by birth, held the chair of medicine in Bologna in the year 1316. We have already seen that, in all probability, Hippocrates did not dissect the human body; apparently Galen did not; superstition forbade it—and any dissection which had up to this time taken place in Europe must have been done surreptitiously. In 1315 Mondino publicly demonstrated the anatomy of two female subjects, and in the following year he undertook the dissection of a third. This boldness on the part of the Bologna Professor gave rise to a considerable sensation at the time, and we are told that, in his dissections, he dared not open the

^a This passage is taken from the admirable translation of Professor Carducci's address, which is given in Professor Kirkpatrick's little book entitled “The Octo-centenary Festival of the Bologna University.”

head to study the structure of the ear, as this would have been deemed a "mortal sin."

But Mondino also wrote a text-book, which exercised a powerful influence in advancing the study of anatomy. It is rude in its style, it is true, very inaccurate, much of it is copied from Galen, and in many cases the parts are merely indicated and not described. Still, at the time it was considered so masterly a work that we find a statute in the books of the Padua University, which orders the candidates for degrees in medicine to follow the text of Mondino. For two hundred years this law was enforced. We shall not stop to discuss the bad effect produced by such a rigid stand-still regulation. I merely mention it to show the esteem in which the work was held.

The effect produced by the example set by Mondino in holding public demonstrations, and the hold which his book took in the different schools was prodigious. In a short time, in almost every university in Europe in which medicine was taught, there were established public dissections once or twice a year, and during these the parts which were displayed were described from the text of Mondino. To give you an idea of how rudely these were conducted, I may mention that the demonstrator was generally a barbarian, and the implement which he wielded was a razor.

We cannot pause to take note of the discoveries which were made by Mondino and his successors in Bologna; but we would be doing him an injustice were we to omit to mention that he calls attention to the sigmoid valves of the heart, under the name of *ostiola*, or little doors, and that he comes very near to the discovery of the general principles involved in the circulation of the blood three hundred years before the illustrious Harvey. Like so many others, he stood on the threshold, but was prevented from grasping the full truth by slavish subserviency to the authority of the ancients.

The work commenced in Bologna by Mondino was not allowed to lapse. Alessandro Achillini, a celebrated physician and anatomist, made some important discoveries, and did much to advance the science. He published a commentary on the text-book of Mondino, and he likewise wrote an anatomical treatise of his own. He was an acute observer, but his reputation appears to have depended more upon his fame as a philosopher. So great were his powers as a logician that he was nicknamed "the great Achillinus and the devil." With his profound learning he combined an extreme sim-

plicity of character, and it is stated that in consequence he was frequently imposed upon by his students.^a

But greater than Achillini—greater even than Mondino—was Jacopo Berengario, of Carpi, the next anatomist I have to mention in connection with the Bologna School. In the first instance, a Professor in Pavia, he was called to the Chair of Anatomy and Surgery in Bologna, and he lived there from 1502 to 1527.

The assiduity with which he applied himself to anatomical work was remarkable. He mentions that he dissected over a hundred bodies. He speaks of his long experience in anatomy, and he asserts what no one before him could have done—viz., that all his descriptions have been taken directly from the object. It is clear then that he was no mere copyist—no blind follower of Galen.

So great was his zeal that some authors have been led to charge him with the vivisection of two Spaniards, who were suffering from small-pox, in order that he might study the peristaltic action of the intestines. This is a vile slander, as Lauth, in his excellent History of Anatomy, shows. The grounds upon which the imputation is based are—(1) that he had a hatred of the Spaniards, and (2) that he was banished from Bologna. But Berengario in his writings reproaches, in the strongest manner, Herophilus and Erisistratus, who are supposed to have dissected living criminals in Alexandria, and he explains that only in the course of a surgical operation has he ever applied a knife to the living subject.^b Portal assures us that his banishment was due to the inquietude which was produced in the Inquisition by the free manner in which he had discussed the anatomy of the organs of generation.

With the name of Berengario are associated the *valvulæ conniventes*, the *vermiform appendix*, the opening of the biliary duct into the

^a Achillini gives a good account of the brain; he discovered the malleus and incus; he knew the ileo-cæcal valve, and noticed for the first time the orifices of Wharton's ducts.

^b Fallopius makes the charge, but it is evident he had been misled. The same charge was made against Vesalius at a later date. One thing, however, is perfectly clear, viz., that the early anatomists dissected, in the most ruthless manner, living animals. Tables for the purpose are figured in several of their works, and in the great treatise by Vesalius a pig is represented, bound and ready for dissection. In Helkiah Crooke's work, which may be considered to be the first great treatise on anatomy published in the English language (1615), the author protests against the indiscriminate vivisection of animals. It should be done sparingly, he says, and with the view of elucidating the action of the heart, blood-vessels, intestines, and brain, and by what muscles the different parts are moved.

duodenum, the greater relative capacity of the female pelvis, and the arrangement of the arteries at the base of the brain.^a

In the early part of the sixteenth century Andreas Vesalius appeared. No one before and no one since has done so much to place human anatomy upon a proper footing. Italy cannot lay claim to him by birth, and Bologna can lay only part claim to him as a Professor. He was born in Brussels, and educated in Louvain and Paris. At the early age of fourteen he commenced his anatomical studies under the Parisian teacher Sylvius (Jacques Dubois), and the enthusiasm with which he threw himself into the work may be judged from the fact that he robbed the gibbet of the bodies of executed criminals, and even dissected subjects in his bed-chamber.

In 1536, when only twenty-three years old, he was elected by the Venetian Republic a Professor in the University of Padua. Afterwards he obtained similar appointments in Bologna and Pisa. No greater evidence of the esteem in which he was held could be given than the fact that he was allowed to hold these three Chairs in three different Universities at the same time. His anatomical teaching was confined to the winter months, and he spent a few weeks in each of these cities alternately, demonstrating and teaching human anatomy.

With the increased opportunities which Vesalius now had of studying directly the structure of the human body, his dissatisfaction with the writings of the older anatomists grew apace, and he began boldly to dispute the authority of Galen. Finally, at the age of twenty-five, he commenced his great work upon anatomy—a work which marks a distinct epoch in the history of this science, and constitutes the foundation upon which our modern anatomy is constructed. This *magnum opus* was completed when Vesalius was twenty-eight years old. It was published at Basle under the immediate supervision of the author. While thus engaged he employed his leisure time in preparing a natural skeleton, which is still preserved in the museum of that city.

Vesalius, at the same time, effected a reformation in anatomical drawing. The illustrations which accompany the text—more especially those of the bones and muscles—are most artistic and anatomically correct. Some have thought that these were from

^a Portal goes so far as to suppose that he used the method of injection. This is extremely doubtful. Berengario was the first to employ mercurial inunctions for the cure of syphilis. At this period that disease was very prevalent in Europe. Berengario did much to stem its progress. He consequently amassed a considerable fortune before he was banished to Ferrara.

the pencil of the great Titian; but now it is generally admitted that it was not this celebrated artist but his favourite pupil, Johannes Stephanus von Calcar, who drew them.

Vesalius demonstrated in the clearest manner that the anatomy of Galen, which was being applied at that period to the human subject, was not the anatomy of man but the anatomy of the monkey. For this audacious assault upon authority he was attacked in the most virulent manner, and the foremost and most bitter of his adversaries was his old master, Sylvius. In this encounter Sylvius, notwithstanding the abuse and calumnies he heaped upon Vesalius, got much the worst of it. And when at last he was forced to admit that some of the statements of Galen did not correspond with what was found in the human subject, he covered his retreat by insisting that the structure of the human body had changed, *and not for the better*. It was deterioration he saw, not improvement, although the standard of excellence chosen by Sylvius was Galen's description of the ape.

Vesalius was evidently a passionate, sensitive, and masterful man. In pique at the bitter attacks to which he had been subjected, he retired to the Court of Madrid and burnt his remaining papers. His career as an anatomist virtually ended at the early age of thirty.^a

Bologna has also the credit of being the school in which Guilio Cesare Aranzio, and Costanzo Varolio taught and worked. For more than thirty years Aranzio, who had the advantage of studying under the great master, Vesalius, held the Chair of Anatomy in the Institute. Varolius is a name we are acquainted with, from the *pons Varolii* of the brain.

During the sixteenth century Bologna no longer stood alone as the one centre in Europe where anatomical investigation was conducted. Her example was followed by the other cities of Italy, and thus we find Eustachius, the contemporary of Vesalius, at Rome; Fallopius, the pupil of Vesalius, at Padua; and Fabricius, the teacher of our own Harvey, in the same University. By degrees also the other countries in Europe lost their veneration for the writings of Galen, and the pursuit of anatomy in a proper spirit became general.

Bologna had fulfilled her mission, and although, during the last

^a Vesalius met with a sad end. On his return from a pilgrimage to Jerusalem he was wrecked on the Island of Zante, where it is said he perished of hunger. It is not very clear what led him to undertake this pilgrimage. Different reasons are ascribed by different authors.

three centuries, she no longer stands out as a star of the first magnitude, she has maintained her own as a centre of anatomical thought and training. The Professor at present in the Chair of Anatomy is Luigi Calori.

But I cannot pass on to describe the Octo-Centenary Celebration without referring to the work of Galvani, and also alluding to the encouragement which appears to have been given to women in Bologna to engage in anatomical pursuits.

Galvani is a name upon which the University authorities and the City of Bologna appear to dwell with the greatest pride and affection, and well may they do so. During his life they treated him scandalously.^a Everyone has heard of his brilliant discoveries in the domain of animal electricity, and the part which Madame Galvani, and the frogs she was preparing for dinner, had in these. In the Rector's Room in the University there is a striking oil-painting, in which Galvani, his wife, and the immortal frog, are depicted.

It has been asserted that women have filled the anatomical chair in Bologna. Certainly both in early times and at present the higher education of women appears to have received every encouragement. Thus, it is related that, in the fourteenth century, Novella Calderini or D'Andrea acted as her father's substitute, and delivered lectures on Jurisprudence, when, through illness or other causes, he could not fulfil his duties. It is further told, that in case her beauty would distract the attention of the students, she lectured behind a curtain. Then there was Properzia de Rossi, who acquired fame as a sculptress; Laura Bassi, in the eighteenth century, who is said to have lectured on Philosophy; and Anna dalle Donne, about the beginning of the nineteenth century, a famous physician and obstetrician. But further, at this moment a lady lectures on the Slavonic languages, having received her appointment directly from the Crown.

In anatomy, although the names of several women are mentioned, it does not appear that any one ever attained the dignity of being elected to the chair, or even to a lectureship. One of those whose names have come down to us, Alessandra Giliani dal Porsiceto, is recorded as having been a most skilful and neat dissector, and as having assisted Mondino in preparing the dissections for his

^a Galvani had acquired note as an anatomist before he made his electrical discoveries. He acted as Lecturer on Anatomy in the Institute of Bologna. Having refused to take the civic oath of allegiance to the Cisalpine Republic, "he was barbarously deprived of all his offices and dignities," and reduced to poverty. He died in 1798.

public demonstrations. Another, Anna Morandi or Manzolini, lived in the first part of the eighteenth century. Her husband was an artist, a sculptor, and a modeller in wax. She assisted him in his work, and soon excelled him both in her knowledge of anatomy and her skill as a modeller. Her models of the pregnant uterus were particularly fine.

The centenary of a University which, independently of its great history, lays claim to the proud title of ALMA MATER STUDIORUM, is no ordinary centenary, even in an age in which celebrations of this kind have been unusually plentiful. The invitation, therefore, which Bologna issued was very largely accepted in every quarter of the globe. The Universities in Germany were most numerously represented, no fewer than twenty having sent delegates. Great Britain and Ireland sent representatives from thirteen, or, if we include the colonies, from eighteen Universities, and America from fourteen. Nine Universities in Austria, and eight in France, were represented. In all, 103 foreign Universities answered the summons, and from these 172 delegates were sent. A very large proportion of these were Professors of Law, but, as might be expected, Medicine in all its branches was well represented.

Six delegates went from Ireland—viz., Dr. Dunne and Dr. Moffat, President of Queen's College, Galway, from the Royal University; Professor O'Ryan from Cork College; Professor Allman from Galway College; and Dr. Haughton and myself from Trinity College.^a

The text of the Dublin University Address ran as follows; and when I mention that it is from the pen of Professor Palmer it is not necessary for me to extol the purity of its Latinity or the excellence of its style:—

“ CANCELLARIUS, DOCTORES, ET MAGISTRI UNIVERSITATIS
DUBLINENSIS UNIVERSITATI BONONIENSI S. P. D.

“ PERGRATUM nobis fecistis quod tam benevolo animo nos vocavistis in societatem gaudii, quo octingentesimum natalem Universitatis vestrae celebraturi estis. Digna quidem tam alta vetustas est quae

^a The British delegates were:—*Aberdeen*, Professor Harrower; *Cambridge*, Professors Adams, Jebb, and Middleton; *Durham*, Mr. Hastings Rashdall; *Edinburgh* Principal Sir William Muir, Bart., Sir H. Oakley, and Professor Kirkpatrick; *Glasgow*, Professors Jebb, Ramsay, and Ferguson; *London*, Dr. Pole; *Victoria University*, Professors Conway and Munro; *Oxford*, Professor Holland, and Messrs. Spencer-Stanhope, Symonds, and Vernon; *St. Andrews*, Principal Donaldson and Professor Knight. The Universities of Bombay, Adelaide, Sydney, Otago, and Wellington were also represented.

splendido ritu et doctorum virorum concursu honoretur. Quippe Bononiam omnibus quae hodie usquam sunt Universitatibus aevo antecellere notum est: inmo ceteris gentibus de rhetore conducendo vixdum cogitantibus, iuris, medicinae, artium quae dicuntur liberales studiis, iam tum Bononia florebat. Vivit adhuc fama IRNERI qui facem obscuro saeculo praetulit, iurisque Romani studium prope obsoletum apud vos revocavit. Quae tellus non novit VESALIUM qui fabricam corporis humani curiose scrutatus internas caulas canalesque adhuc ignotas detexit, ita ut creator Scientiae Anatomicae iure audiverit? Vestrum est praegrande nomen GALVANI, cui aura electrica, quae tot miracula peperit, plura paritura est, primo afflavit; vestra fama illustrissimi excultissimique viri MEZZOFANTI, Linguae Graecae apud vos olim Professoris, qui ad ordinem Cardinalium mox proventus, quadraginta tribus gratulantibus patrio cuique sermone respondit. Nec magnorum virorum tantum series Bononiam illustravit. Feminae quoque ingenio clarae, quod raro alibi licuit, litteras artesque apud vos promoverunt. Non tam aversus equos a nobis sol iungit, ut ignoremus nomen AGNESIAE, quae sui aevi mathematicos doctrina superavit, cuius scilicet linea curva, Maga quae dicitur, etiam nunc philosophos delenit: aut ANDREAM, inter paucos viros eloquentem, facie vero formosiore quam quae tuto ab auditoribus spectaretur. Sed de his multisque aliis scribentes nos deficiat dies. Bononiae nunquam defuturos qui tam pulchram famam per longa saecula propagent ex animo precamur, illud nequaquam metuentes

“Ne vestrum tangat scabra robigine nomen

“Haec atque illa dies atque alia, atque alia

ut suavissimi poetae eiusdemque olim Bononiae vicini verbis utamur.

“Ergo humanissimae epistolae vestrae libenter obsecuti cum bono auspicio duos nostrates mittimus, qui vobis nostro nomine praesentes gratulentur, omniaque fausta tam bono die precentur, Samuelem Haughton, collegii nostri e Sociis Senioribus, et Daniele Iohannem Cunningham, Anatomiae et Chirurgiae Professorem: quorum hic familiam ducit in arte sua, ille vir primarius est in omnibus quae ad rerum naturae scientiam pertinent: quos maiorem in modum vobis commendamus.

“Dabamus Dublini x Kal. April. MDCCCLXXXVIII.

“Scribendo adfuerunt

“IOHANNES THOMAS BALL, LL.D., *Vice-Cancellarius*.

“GEORGIUS SALMON, S.T.P., *Praepositus*.

“IACOBUS GUILIELMUS BARLOW, M.A.”

When the delegates arrived in Bologna, the preparations for their reception were found to be in a very backward condition. Everything apparently had been left over to the last moment, and it was evident that the authorities had not anticipated the many difficulties attending the reception of 182 foreign representatives, the majority speaking different languages, and comparatively few possessing a colloquial knowledge of Italian. It was not surprising, then, that the arrangements were found to be inadequate. This, whilst it produced some discomfort and entailed a good deal of trouble on the part of the delegates, happily did not mar the success of the celebration; and although I have alluded to it, I would not for a moment impute to the Bologna University any want of hospitality. Far from this, it was most evident the one desire of the authorities was to do everything in their power to make the festival an agreeable one to their foreign guests. And now that we look back upon the proceedings after a lapse of nearly five months, this personal matter sinks into insignificance beside the grand effect which was produced by the celebration when looked at as a whole. It will, therefore, be understood that we have no sympathy with those who were inclined to resent the defect in organisation to which I have referred, as a slight upon themselves or the Universities they represented. The function was not to be regarded from a strictly academic point of view. The reception of the delegates formed a small part of the great festival. The presence of Royalty, and the intimate relationship which had existed so long between the Bologna University and Italian politics, rendered the celebration not a mere gathering of representatives from the different learned bodies in Europe, but a great national manifesto—an outburst of sentiment in which outsiders, in many cases, could hardly be expected to participate.

On Monday morning, the 11th of June, the King and Queen of Italy, accompanied by the Heir-apparent, the Prince of Naples, entered Bologna, and the festival commenced. Not much of interest took place on that day. In the forenoon the delegates were received by the Sindaco; in the afternoon a fine equestrian statue of King Victor Emanuel II. was unveiled by King Humbert; and in the evening the delegates met with the view of choosing the speech-makers for the ceremony on the ensuing day. This meeting was a scene of considerable confusion, owing to the babel of tongues and the difficulty that was experienced in satisfying the claims of the different countries. Finally the matter was adjusted to the

satisfaction of everyone by giving a speech to each nationality. In place of three speeches, as originally proposed, the number rose to about fifteen—not a pleasant prospect for those of us who were not polyglots, and were condemned to sit through them all. As it so turned out, however, we were wrong in supposing that a great variety of languages would be heard on the following day. The great majority spoke in Italian; of these I may instance the representatives of Germany, Austria, Hungary, Denmark, Norway and Sweden, Portugal, Romania, and America. The others spoke in French, Greek, and Latin. The representative from Holland made a distinct point by quoting, at the end of his speech, a line from Dante:

“Tu duce, tu signore, tu maestro.”

Professor Jebb, of Glasgow and Cambridge, was selected to act as spokesman on behalf of the Universities of Great Britain and Ireland.

Later on in the evening a very brilliant reception was given by Queen Margherita in the Municipio, where the delegates had an opportunity of becoming acquainted with each other, and a few of the more distinguished had the honour of being especially presented to Her Majesty.

On Tuesday, the 12th of June, the true function took place. At nine o'clock in the morning the delegates, to the number of 341, comprising those from the different Universities of Italy, met in the court of the New University in academic costume. A procession was then arranged—the students in front, next the delegates in alphabetical order, according to the countries which they represented, and the Bologna Professors, with the University banner, in the rear. Marshalled in this order, the procession started for the Old University or Archiginnasio. A finer spectacle could hardly be conceived, although it was difficult for one who took part in it to appreciate its full grandeur. Imagine a clear, bright Italian day; the streets, balconies, windows, every inch, every point of vantage occupied by excited citizens. Through this crowd, and between the quaint, graceful arcades which flank either side of the streets, the procession slowly moved. As each strange costume came under the eyes of the sightseers, the eager question was asked, “What country?” Then resounded the cries of welcome:—“Viva la Germania!” “Viva l’Inghilterra!” “Viva l’Irlanda!” From a balcony on the Municipio the King and Queen looked down upon the academic pageant as it passed below, and of all the

nationalities the British were the only representatives who showed their appreciation of the Royal presence by raising a hearty cheer. As the procession neared the Archiginnasio (I think it was in the Via Farini), the ladies of Bologna threw down upon the delegates flowers, and sprigs of oak and laurel—a delicate piece of flattery which was highly appreciated. Lastly, as it entered the Piazz di Galvani, and came to the front of the Archiginnasio, it passed between the students, who were drawn up in two rows. They were in a state of frantic excitement, and hoarse with their congratulatory cries; and in the enthusiasm of their welcome they shook the hands of every delegate they could get at. I have something more to tell you of these pleasant, happy fellows—the youth and hope of Italy—but not just at present.

The commemoration ceremony was held in the court of the Archiginnasio, which was covered by an awning of red and white, to keep out the scorching rays of a blazing sun. The King and Queen were seated on a dais erected on the side opposite the entrance; in the gallery immediately above this was placed the orchestra, whilst the arcades and galleries on the other three sides were filled with gaily-dressed ladies and other spectators. In the body of the court were seated the delegates.

The proceedings were opened by the singing of an ode—specially written for the occasion—by a prima donna named Signora Catanio. The Rector then stated briefly the object of the commemoration. Paolo Boselli, the Minister of Public Instruction and one of the delegates from the University of Genoa, followed with a graceful speech, in which he traced the academic history of Bologna, and specially alluded to some of the distinguished women who had been connected with the University—viz., Properzia de Rossi, Laura Bassi, Clotilde Tambroni, and the authoress of the witches' curve, Gaetana Agnese.

When Boselli had finished, Professor Carducci, the famous Radical poet of Italy, entered a richly-draped tribune, and commenced his centenary oration. I have already quoted a passage from this singularly eloquent address. He spoke for rather more than an hour, and then the delegates presented their congratulatory addresses. This part of the programme could hardly be said to be well managed; as each country was called the representatives went up to the throne in a confused bunch, the spokesman elbowed his way to the front, and delivered his speech. When he had finished the addresses were presented to the Rector without any attempt at

order or proper formality. Professor Jebb, who introduced the delegates from Great Britain and Ireland, made his speech in Latin. He spoke as follows:—

“Hoc die felicissimo, cuius memoria nobis, dum vivemus, obversabitur, posteritati tradetur sempiterna, salvere iubemus vetustissimam atque illustrissimam studiorum altricem, quam his tam augustis auspiciis, hac discipulorum doctorumque frequentia, hoc tanto, omnium gentium favore, sæcularia sua octava celebrantem intuemur. Magnopere quidem gaudemus quod ad ferias unice memorabiles agendas vestra nos humanitas vocavit, qui ab omnibus Imperii Britannici partibus fausta Universitatum vota et gratulationes afferimus; alii ab Insulis profecti Britannicis, alii ab Indiæ litoribus, alii ab iis Anglorum Coloniis qui sedes habent sive trans mare Atlanticum sitas sive Crucis Australis sideri subiectas; ut in hac nostra salutatione vix minor cælorum varietas quam animorum concordia cernatur.

“Immortalis est Studii Bononiensis gloria quod iam in sæculo armis magis quam litteris idoneo, iuris Romani disciplinam recolens, eas potissimum artes revocavit per quas ceteræ otium nactæ vigeant, neque solum doctrinæ fructibus ditentur homines, sed ipsa societatis humanæ vincula confirmentur. Si vero ab hoc principali beneficio ad alia transeamus, quot et quales recordamur eiusdem Almæ Matris alumnos, qui vel Theologiæ profuerunt vel Philosophiæ, qui Litteras Artesque luculenter excoluerunt, qui de arte Medicinæ præclare sunt meriti, qui Scientiæ Naturalis fines propagarunt; qua in serie nobilissima, tanquam stellæ radiis haud incertis illæ quidem sed lenioribus elucentes, feminarum quoque illustrium nomina reperiuntur. Iuvat Anglos præsertim commemorare iurisprudentiæ studia a Vacario Oxonii instituta; neque, si ad recentiora respiciatur, illud prætermittere debemus, celeberrimi Scientiarum Instituti Bononiensis conditorem, Ludovicum Marsigli, cum Newtono Cantabrigiensi amicitia fuisse coniunctum.

“Floreat semper Universitas Bononiensis; floreat urbs pulcherrima, Musarum sedes, libertatis arx, Bononia! Quæ dum precamur, hoc etiam liceat precari; valeat antiqua huius loci religio, quo tota olim Europa maiores nostri confluebant, valeat hæc feriarum sollennis celebratio, ad eos animorum affectus fovendos qui inter omnes orbis terrarum gentes pacem ac benevolentiam tueantur.”^a

^a Professor Jebb also contributed to the centenary a Pindaric ode, which was appreciated so highly by the Bologna University authorities that they presented a separate copy to each delegate, along with a translation in Italian verse by Prof. Pelliccioni.

The Trinity College address was contained in a handsomely bound volume, and was universally admired. Each page was finely illuminated and decorated with paintings of the wild flowers and antiquities of Ireland. In handing it to the Rector, Dr. Haughton held it open, so as to display the page on which was depicted the Chalice of Ardagh, the Cross of Cong, and two ancient Irish hunting horns. At the same time, in his capacity of President of the Royal Irish Academy, he presented the address from that learned body.

The ceremony was brought to a close by a short Latin oration by Professor Gaudino.

The real business of the day having been satisfactorily disposed of, the afternoon and evening were devoted to feasting and amusement. In the Borsa, at six o'clock, a banquet was given by the Government; but, beyond the mere eating and drinking (both of which, it must be allowed, were excellent), there was little pleasure or profit to be derived from the entertainment. The guests were so arranged around the sides of a large, bare, square hall, that absolutely nothing could be seen, and the few speeches which were delivered were quite inaudible to at least four-fifths of those present. It had one merit, and that was that it was not prolonged. At half-past eight there was a general stampede to the Teatro Comunale, where one of Wagner's operas was performed for the special benefit of the delegates.

On Wednesday the honorary degrees were conferred in the Archiginnasio, in presence of the King and Queen, and a brilliant assemblage of the *élite* and fashion of Bologna. No official list of the honorary graduates was issued, and no announcement had been made to those who were to be thus honoured. The Dean or Head of each Faculty from which the degrees were to be issued read out the names from a list which had, up to that time, been kept a profound secret. In most cases, the names thus read out were inaudible, and even when the Dean contrived to make himself heard, he manipulated the foreign names in such a manner that they could barely be recognised even by the owners.

Dr. Haughton's name had all through been a source of difficulty to the Italians, both in point of spelling and pronunciation; and on this occasion, although we had reason to believe that it was uttered, we altogether failed to distinguish it. The following morning we naturally looked to the newspapers for the official list of the honorary graduates, but here we were disappointed. I shall give you an extract from the principal newspaper of the province (the *Gazetta*

dell' Emilia), which will show how partial the information was:—“Finally, Professor Brugnoti announced the new Doctors of Medicine. They are names well known to modern science—Koch, Kö'liker, Liebermeister, Weir-Mitchell, Schiff, Haughton, Schiess, and others, whose names could not be distinctly heard, on account of the great applause which greeted the new Doctors of the Bolognese Studium.” This report was, so far, satisfactory, inasmuch as it showed that we had not been mistaken in believing that Dr. Haughton had been a recipient of this honour.

We have not yet had an opportunity of inspecting the official list of the new graduates—indeed I am very doubtful if such a list has been published; but, if I am not mistaken, Sir Joseph Lister, Jonathan Hutchinson, and Sir Spencer Wells, also received the degree in medicine. Time will not permit of my entering into details regarding the degrees issued from the other faculties. So far as we could judge, from our very imperfect information, the names had been selected in every case with great care and judgment.

The ceremony observed in conferring the Doctor's degree of the Bologna University is very interesting. When the graduate presents himself, a massive signet ring is slipped over his forefinger by the Dean of the Faculty and then withdrawn.^a The forefinger instinctively tends to close during the process; but the fact that the ring is a very ancient one, and still remains in the possession of the University, speaks well for the skill of the various Deans who have used it. At the same time a diploma, with a fine impression of the University seal, contained in a silver-plated box, is handed to the new graduate.

A very spirited address by Professor Ceneri, the occupant of the

^a The ancient School of Salerno, which is even older than the Studium of Bologna, practised the same custom. This School, I understand, is now amalgamated with the University of Naples. There is no graduation ceremony at all equivalent to this in Ireland, but in Scotland the new graduates are what is termed “capped.” In other words, as the graduate comes forward his head is touched by a velvet cap held in the hand of the Chancellor. In St. Andrews, in former times, the graduate sat during this ceremonial upon an ancient stone seat, still preserved in the University. The *Pileus* was the Roman cap of liberty—bestowed on the slave when he was enfranchised. It afterwards became the mark of the University man. In Bologna, at one time, when a candidate was admitted as one of the “Doctors,” he was given a *hat*, a book, a ring, and a kiss. In some of the Scotch Universities, it is still the custom to present a book to every Professor when inducted into his office—the meaning is obvious. The *ring* is a symbol used on many solemn and binding ceremonies—*e.g.*, the wedding ring, the episcopal ring, &c. I am indebted to Professor Mitchell, of St. Andrews, for this information.

Chair of Roman Law, and a noted criminal advocate, brought the ceremony to a close.

The fourth day of the Festival was devoted to the honour of Galvani. Professor Albertoni gave a lecture in the morning upon his life and work, and in the evening the students placed a laurel crown upon his statue.

I have now come to the most pleasant feature of my narrative, and that is the part which the students of Bologna took in the Centenary Festival. I would hesitate to say that they surpassed the Professors, but so far as an onlooker could judge, they exhibited more unanimity, a greater enthusiasm, and a more striking cordiality. These qualities are perhaps the characteristics of youth, but, in addition, their organisation was undoubtedly more carefully devised, and their arrangements were more satisfactorily carried out. To me the glimpses which I got of their festivities constitute the happiest reminiscence of the celebration.

Large numbers of students from the other Universities of Italy had thronged to Bologna to assist at the festivities. The German students were also largely represented, whilst others had come from France, Athens, and Buda-Pesth. Great Britain and Ireland, in the first instance, was represented by only one student—a delegate from the University of Edinburgh; but later on two representatives put in an appearance from Cambridge. Bologna was thus crowded with students, and of these the Italians were readily recognised by the distinctive caps which they wore. Each Faculty has its own colour—Medicine, red; Law, blue; Arts, green; and the Fine Arts, white. The red-caps were decidedly in the majority. The costumes of the Germans, which probably some of you are familiar with, were very effective. They carried rapiers, and the faces of several were hideous with scars. Markings of this sort had evidently been taken into account in the choice of the delegates from Germany. Two students from Buda-Pesth excited general notice on account of the richness of their academic dress.

The student-delegates, for the most part, arrived on Saturday afternoon, and a magnificent reception was prepared for them. At the railway station the Bologna students, with innumerable carriages and an escort on horseback, awaited the arrival of the train. Some of the Italian Universities had sent presents along with their delegates. Thus Turin sent a huge and richly-decorated cask of wine; from Padua came a splendid mouse-coloured ox, with gilded horns and gay trappings; the students from Parma

brought a gigantic Parmesan cheese. The delegates were received with the greatest enthusiasm and the warmest welcome, and immediately a procession was formed. In front went the mounted escort, then followed a student dressed in female attire—airy and light, and with not much skirt—to represent Venus. The offerings of the delegates came next. The cask of wine, drawn by a handsome horse, looked somewhat like a watering-cart, and astride the top of it sat a grotesquely-dressed Bacchus waving his sceptre. Upon the cheese there was an inscription in Latin to the effect that it was “*ab omnibus laudatum.*” The carriages with the delegates followed in the wake of the cheese.

I have often had occasion to admire the vocal powers of our students in Ireland, but pardon me if I say that they are excelled in this respect by their *confrères* in Italy. The streets, of course, were crowded with citizens, who had turned out to offer their greetings to the delegates, and all along the line of march there was a continuous interchange of salutations. Before they had gone far the Bologna students, who acted as masters of the ceremony, and from the carriages introduced the various delegates to the populace, became as hoarse as crows, but still they persevered, and every moment the raillery and excitement increased.

I regret that time will not allow me to follow all the doings of the students in Bologna at this festive time. I must content myself by mentioning one or two of the leading events.

On Monday evening they took part, along with the citizens and military, in a great torch-light procession in honour of the King and Queen. This was managed in a very different manner from similar demonstrations in this country, where a blaze of light appears to be the chief object. In Bologna the torches consisted of long poles, on the summits of which were perched artistic devices. The outline of these was brought out by fairy lamps of different colours. The effect was very fine and the procession a great success.

On Tuesday evening the students held their great banquet, and here the offerings of the delegates—the wine, the ox, and the cheese—were discussed. Mr. Constable, the Edinburgh delegate, gives a very racy and graphic account of the proceedings. He tells us that the dinner (which, by the way, was given in the open air about four miles out of Bologna) went on in an orderly manner until two telegrams came—one from the Emperor of Germany and the other from the President of the French Republic. The excitement then became so intense that the table was forsaken, although

only three courses had been partaken of, and the whole party took to dancing, embracing, and handshaking.

On the following evening the students held what they called a "Festa umoristica." It commenced in the form of a procession through the streets. Those who took part in this were attired in mediæval costumes, and mounted on donkeys. The effect was ludicrous in the extreme, and provoked the most unrestrained mirth on all hands. In this manner they wended their way to the Montagnola, where a vast crowd awaited their performance. This consisted in a series of theatrical displays, joisting on donkey-back, and sports of various kinds. The representations which they gave depicted episodes in the history of the Bologna University. Galvani and his frog were not forgotten, and the frog was very cleverly represented by a student, who happened to be a son of the patriotic Count Saffi.

All honour to the students of Bologna, who did so much to ensure the success of the Festival. In many cases they had not an easy part to play. In Italy students enter keenly into politics, and a large proportion of the Bologna students are radical and anti-monarchical. Yet these students subordinated their own feelings and extended a most hearty and respectful welcome to the King and Queen; not a word was uttered even during the heat of excitement but what was courteous and loyal. With all their extravagances there was not a trace of rowdyism. And again, they showed tact in their dealings with the students from Germany and France. International jealousies are especially liable to be fanned into open flame in the young, and although every one knew in which direction the sympathy of the Italian students tended, this was never shown openly, so that good feeling and good fellowship was maintained on all hands.^a

My sketch has been in many respects a very imperfect one. It could not be otherwise within the limits of a single lecture. In finishing, let us wish all success and prosperity to our ALMA MATER STUDIORUM. She has reached a good old age. May she always remain as green and as fresh as at present.

^a In Italy there are twenty-one Universities. The total number of students attending these in 1886-87 was 15,307. In Bologna during that session there were 1,338 students. Only two other Universities in Italy excel Bologna in point of numbers—viz., Naples with 4,083, and Turin with 2,102 students.



